Mosaics in Science Internship Program: 2013 Participants



Catoctin Mountain Park – Thurmont, MD, GPS/GIS Technician

Kristan Culbert graduated from the University of Southern California in December 2011 with an undergraduate degree in Earth Sciences and a minor in Peace and Conflict Studies. She is on sabbatical from a position as a Project Assistant at Inland Empire Waterkeeper, a non-profit organization devoted to protecting the Santa Ana River Watershed, a highly-impacted,

urbanized region that is home to over 4 million southern Californians. She is excited about joining Mosaics in Science and thrilled about having the opportunity to enhance her field mapping and GIS skills, which will be integral to the success of her project, and learning about hydrology and resource management. After completing her internship, she plans to pursue her interests in freshwater science/hydrology, ecology, and environmental justice in graduate school. Kristan's interests include reading and writing, enjoying the outdoors, and cooking.

"I dream of earning my doctorate, conducting research and teaching in higher education, and continuing to work with grassroots-based, environmentally-minded community organizations."



Chesapeake and Ohio Canal National Historical Park – Hagerstown, MD, Hydrogeologist/Wetlands Scientist

Ivan Carabajal is a recent graduate from the University of California, Davis with an undergraduate degree in geology. For his senior thesis, he dated detrital zircons from rocks located on the western foothills of the Sierra Nevada. Ivan loves being involved with research and learning more about geologic processes. In 2012, he was a teacher's assistant for two 9th grade

Natural Science classes at Holmes Junior High School in Davis. His previous activities outside of school included playing drums for a punk rock band in Los Angeles during 2005-2010. Ivan has recently started playing ice-hockey.

"I hope that one day I will be a geology professor at a city college where I can draw more students into majoring in the Earth Sciences."



Florissant Fossil Beds National Monument - Florissant, CO, Paleontology/Museum Intern

Selva Marroquin is a senior at Tufts University with her academic interests focused mainly on invertebrate paleontology. This summer with the Mosaics program, Selva is excited and honored to get the opportunity to learn more about paleobotany. In her spare time, Selva runs a group at Tufts that helps serve and prepare food at shelters in Boston. She has always believed in giving back and hopes to have a career that would make an

impact in someone else's life. Selva credits her professors in the Earth and Ocean Sciences department at Tufts that sparked her interest in the geosciences and paleontology. Her ultimate career goal is to become a university professor in the geosciences and do research in paleontology. Selva will be applying to graduate schools this fall to earn a masters degree, and eventually a PhD.

"I can only hope that someday I can be a positive influence in a student's life and help spark a love for the geosciences just as my professors have done for me the past three years."



Gateway National Recreation Area – Staten Island, NY, Geology – GIS Specialist

Carlos Carvaljal recently received his undergraduate degree in geology from Rutgers University. His area of interest is in climate change as reflected in marine environments and how these changes influence the chemistry of the oceans. He is planning to start working on a PhD in oceanography next fall, and eventually work in climate change policy. Carlos is a member of the Geological Society of America and the American Institute of Professional Geologists. Carlos was co-president of the Rutgers Geology Club in 2012-2013. His hobbies are climbing, hiking, working out and playing guitar. The experiences and advance research skills that the Mosaics Program

offers was what drew Carlos to apply for the position. He hopes to improve his mapping skills using GIS, and acquire further research experience in geomorphology.

"This is a great opportunity to grow as a scientist and as a person so I will give my 100% to get the best of it."



Grand Canyon National Park – South Rim, Grand Canyon Village, AZ, Geologist – Geohazards

Kaytan Kalkar is a recent graduate in geology from the University of California, Riverside, and wants to pursue a master's degree. His scientific interests lie in stratigraphy, volcanology and glaciology. He is a member of The Geological Society of America and has a long term goal to be employed as a geologist with a well established company. His hobbies are hiking, swimming, and playing soccer. Kaytan wants to remain involved in research and was fortunate to conduct research in a biogeochemistry lab during his undergraduate education. He has always been intrigued by the

factors that drive geologic processes and believes this internship would be an excellent opportunity for him to learn real world situations as a geologist and gain valuable experience.

"I am positive that the Mosaics in Science program will enable me to further enhance my knowledge in a professional setting."



Mammoth Cave National Park – Mammoth Cave, KY, Karst Geoscience Research Assistant

Jay Kim graduated from the University of Rochester in 2011 with an undergraduate degree in geology. His scientific interests are in environmental and economic geology; he hopes to couple both interests in a future career. He was accepted as a graduate student at Northern Illinois University, where he will pursue a research-based master's degree in environmental geology. Jay's interests and hobbies are: singing, folding origami, reading science fiction/non-fiction, and volunteer service. Prior to his GSA/NPS experience he served as an AmeriCorps National Civilian Community Corps/Federal Emergency Management Agency Corps member for nine months, where he was part of the Hurricane Sandy disaster relief and recovery operations in New York City from November 2012-March 2013.

"Through the GSA/NPS Mosaics program I hope to gain a better understanding of how karst systems develop and how they play a role in groundwater flow. I also aim to gain a better understanding of GIS."



Mount Rainier National Park – Ashford, WA, *Interpretation Specialist*

Marissa Reis recently graduated from the University of California, Davis with a degree in geology and a minor in oceanography. She is passionate about learning new things about the Earth and firmly believes in the value of sharing that knowledge with other people in hopes that they can make better connections with the world in which we live. As part of a Science

and Math Teaching program, Marissa was a teacher's assistant in math and science classrooms at the elementary, middle, and high school level. Her internship with Mt. Rainier National Park is her first experience working in the National Park Service. In her spare time, Marissa enjoys hiking, backpacking, rock climbing, and running.

"I'm very excited to be able to take advantage of this opportunity and hope that it opens up new doors for future career options."



National Capital Parks East – Washington DC and Maryland, Resource Assistant

Giessell Aguilar recently graduated with an undergraduate degree in biology from the University of New Orleans. She was born and raised in South Lake Tahoe, California and grew up camping and hiking along the Sierra Nevada Mountains. She became interested in biology as a child and knew that one day her dream job would be to work outdoors. Juana decided to major in pre-med at the University of New Orleans, but took a shift of interest in her coursework. She decided that she wanted to work towards a degree in Ecology or Conservation Biology. During her

last semester at UNO, Giessell had the opportunity to work with Behavioral Ecology Professor, Dr. Jerome Howard, working with the endangered Louisiana Sandhill Crane, and in the greenhouse planting vegetation for an ongoing research on grasshopper Herbivory and Optimal Foraging. Dr. Howard introduced her to the Mosaics in Science Program and she decided to apply because of her continued interest in the National Park Service.

"I hope to amplify my knowledge and learn more from my supervisors. I hope to learn all the trades that come along with working at NPS. My ultimate goal is to learn how to preserve and conserve nature so that future generations can enjoy it as much as I have."



National Capital Parks East – Washington DC and Maryland, Resource Assistant

Rebecca Fraker attended the University of West Florida and recently graduated with an undergraduate degree in environmental science. She is the first in her family to graduate from college. She has previous experience volunteering with the Florida Forest Service assisting with a habitat restoration project for the Red Cockaded Woodpecker. Rebecca completed a practicum with the Department of Environmental Protection at the end of her senior year where she worked at an offsite greenhouse cultivating plants for coastline restoration. In her spare time, Rebecca enjoys

camping and canoeing.

"Working with the National Park Service has been a long term goal of mine, and I am so excited for this opportunity!"



Prince William Forest Park – Triangle, VA, *Digital Science Interpretation Intern*

Leyla Farshidpour will begin attending college this fall at California State University, Fresno, majoring in biology, environmental science and english. She took part in National Hispanic Environmental Council's 2012 Institute in New Mexico which exposed her to the National Park Service and GSA, as well as provided her with hands on training in the environmental field. Leyla participates in many extra-curricular activities such as Academic Decathlon, Science Olympiad, Mock Trial, Poetry

Club, Key Club, Physics and Engineering Club, as well as other clubs and organizations. Her interest in the Mosaics in Science Program is due to her desire to learn more about the environment and raise awareness about the many environmental problems that we are faced with today. Her interests include dancing, photography and Photoshop, reading and writing poetry, and drawing.

"Through the Mosaics in Science program, I hope to grow in my understanding of the environment but also how organizations, such as the National Park Service, deal with the environmental problems that they are faced with and the solutions that they come up with to solve those problems."



Prince William Forest Park – Triangle, VA, GIS Tech/Natural Resource Science Intern

Javar Henry earned his undergraduate degree in May 2012 in marine science from Savannah State University. He was a lab technician for Woods Hole Oceanographic Institution and the National Marine Fisheries Service in 2012 where he assisted in tasks that involved caring for sea anemones, extracting lipids from corals, and identifying stomach contents of fishes. Javar has volunteered for various Earth Day activities, at beach clean-ups at Tybee Beach in Georgia, and at a local elementary school to educate students about current environmental issues. He is certified as a Level 1 scuba diver and has a strong interest in ArcGIS. He plans to further his career using ArcMap GIS either in graduate school or the

workforce.

"I enjoy doing my part to help maintain our natural environments."



Rock Creek Park – Washington DC, Biologic Inventory and Monitoring Assistant

Zenovia Mitchell is a graduate from Hampton University with an undergraduate degree in biology. Her interest in ecology and natural resource management reaches as far back as her childhood growing up in Oregon where she learned how to identify dogwood trees from neighbors. Zenovia's interest piqued in high school when she began building on research and job experiences in field ecology research, and later using those skills in environmental interpretation working with the U.S. Fish & Wildlife Service. She is a member of Minorities in Agriculture, Natural Resources and Related Sciences (MANNRS), and was a member of the undergraduate chapter of the Ecological Society of America's Strategies for Ecology Education, Diversity and Sustainability (SEEDS). Zenovia says that an interesting fact about her is that she is terrified of "any and all bugs".

"Upon hearing about the Mosaics program, and the chance to gain experience in the realm of my graduate studies, I felt it would be a terrific opportunity, and am very fortunate to be able to participate this summer."